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EXAMINER

MA, JOHNNY

ART UNIT

PAPER NUMBER

2617

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,531

Applicant(s)

HENNENHOEFER ET AL.

Examiner

Johnny Ma

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 7/13/2005 regarding the rejection of claims 1, 3, and 4 under 35 U.S.C. 112, first paragraph, have been fully considered but they are not persuasive. The Examiner appreciates Applicant's efforts to further prosecution of the instant Application, specifically in regard to the rejection of claims 1, 3, and 4 that were inadvertently omitted from the previous Office Action. However, the Examiner respectfully disagrees that claims 1, 3, and 4 are supported by Applicant's Specification.

Applicant first asserts "[s]upport for modulating signals onto a system may be found in the specification at page 15, line 20 through page 16, line 5, wherein the discussion centers around modulating signals before transmission and sending digital information on a RF analog carrier using the same" (Remarks pg. 8, para. 3). However, upon review, page 15, line 20 through page 16, line 5 appears to only provide an overview of wideband signal distribution systems that includes modulating a signal for transmission. Applicant also asserts "[f]urther support may be found in the paragraph beginning on page 19, line 6" (Remarks pg. 8, para. 3). This cited portion also lends support for modulating signals for transmission, further teaching that modulated signals may originate from an intelligent device system. However, as noted in the § 112 rejection "the application as originally filed does not provide support for distributing modulated single frequency RF signals onto a wideband signal distribution system wherein "said at least one intelligent device including an RF splitter suitable for distribution said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF modulated signal, and at least one modulator electrically connected to said RF splitter and suitable for modulating

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at least the IP signal portion split by said RF splitter.” The Examiner does not contend that Applicant’s disclosure does not support an intelligent device with an electrically connected modulator. Rather, the Examiner is unable to find support for “an intelligent device...including...at least one modulator electrically connected to said RF splitter and suitable for modulating at least the IP signal portion split by said RF splitter.” Throughout the specification, a splitter is used for the receipt of IP and non-IP signal portions wherein the split IP portion of the signal is demodulated (see pg. 24, line 8 through pg. 25, line 22). In regard to the use of a modulator within an intelligent device, the Specification discloses “[t]he signals incoming from each of the addressable devices 202 are combined by a digital combiner 410, and passed through a traffic sensor 412, at least one modulator 414, and an RF converter section 418” (see pg. 30, lines 13-23).

2. Applicant’s arguments, see pg. 11-12, filed 7/13/2005, with respect to claims 2 and 5 rejected as being anticipated under 35 U.S.C. 102(e) in view of Flickner (US 2001/0037512) have been fully considered and are persuasive. The rejections of claims 2 and 5 in view of Flickner has been withdrawn.

3. Applicant's arguments filed 7/13/2005 with respect to claims 2 and 5 rejected under 35 U.S.C. 103(a) have been fully considered but they are not persuasive. Applicant asserts “that Sutton is designed to accomplish wiring for data communication without modification of the signals. Sutton places the signals for transmission unmodified directly onto the pre-run cables. *See Sutton generally*... The system of Sutton was designed to free bandwidth, which could arguably allow for modulation onto RF signals but the goals of Sutton are in no way accomplished by, nor does Sutton contemplate or enable, modulating and demodulating” (see

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Remarks, pg. 14). The examiner respectfully disagrees and submits that the Sutton reference clearly discloses modulation/demodulation for transmitted signals. The Examiner first notes that the Applicant cites the Sutton reference generally in support of this assertion, but does not cite any specific part of the disclosure. However, the Sutton reference specifically discloses the use of modulators and demodulators wherein “[t]he information outlet 52 contains the electronics needed for several modulators and demodulators” (Sutton 3:13-20) and “[t]he junction box 60 contains appropriate modulator means and demodulator means for communicating over the coax wire 56 with complementary demodulator and modulator means in the information outlet 52” (Sutton 3:25-28). Applicant also asserts “[t]he present office action contends there is a passing reference to modulators and demodulator within Sutton, but Applicant has found no clear teaching of how such modulation and demodulations occurs.” The Examiner agrees with Applicant that the Sutton reference is silent as to how such modulator and demodulation occurs. However, as discussed in the previous Office Action, the Sutton reference was not relied upon for this teaching.

In response to applicant's argument that “it is not clear, nor do Klein and Sutton teach in any manner, or even remotely suggest, that the technologies taught in either reference could be used when combined,” the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the modulation/demodulation of signals matched to the communication medium in order to maximize data flow) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the knowledge generally available to one of ordinary skill in the art. The Sutton, Jr. and Klein references are both directed to using existing wiring (i.e., coaxial cables) for communicating multiple types of data (see Abstracts). Furthermore, as discussed above, the Sutton, Jr. reference clearly discloses the use of modulators and demodulators. However, the Sutton, Jr. reference does not specifically disclose the operation of said demodulators and modulators. The Klein reference discloses the operation of demodulators for receiving data from the coaxial cable (existing wiring) network. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Sutton, Jr. information outlet with demodulators and modulators with the Klein coupling and splitting of different signals to their respective demodulators for the purpose of providing the correct signal to each

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output of the wall mounted information outlet where various media and data signals can be sent over a single coaxial line. Noting that the transmission of various media and data signals over a single coaxial line are taught by both references. Furthermore, In response to applicant's argument that the combination of the teachings of Klein and Sutton would make each redundant, as each intends to accomplish the same goal in different ways, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 3, and 4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the application as originally filed does not provide support for distributing modulated single frequency RF signals onto a wideband signal distribution system wherein "said at least one intelligent device including an RF splitter suitable for distribution said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF

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modulated signal, and at least one modulator electrically connected to said RF splitter and suitable for modulating at least the IP signal portion split by said RF splitter.”

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutton, Jr. (US 5,968,118) in further view of Klein (US 6,637,030 B1).

As to claim 2, note the Sutton, Jr. reference which discloses an information outlet and industrial set top functionality. The claimed “wideband signal distribution system including 568 standard wiring for distributing a plurality of non-IP, RF modulated signals” is met by “...coax wire 56 is used to multiplex all of the signals which are required by the user in the location 54...signals which are sent over the coax cable 56 include video signals from a video monitor or a conventional TV receiver 68” (Sutton, Jr. 3:43-47), note that coaxial cable is recognized as a cabling choice in the 568 wiring standard. The claimed “at least one intelligent device for demodulating single frequency carrier RF signals off of said wideband signal distribution system” is met by “...information outlet 52 contains the electronics needed for several modulators and demodulators” (Sutton, Jr. 3:13-15). The claimed wherein said single frequency RF signals comprises digital information are met by “[o]ther signals, which may be sent bidirectionally, between the information outlet 52 and the junction box 60, include telephone signals from a telephone 72 or telephone head end 22, data signals from a computer or terminal

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device 74 or server 20, and infrared signals from a remote control unit 76 (Sutton, Jr. 3:50-55) where the disclosed telephone, computer, and server are intelligent peripherals. The claimed “said at least one intelligent device including an RF splitter suitable for receiving said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF modulated signal” is met by “[t]he coax wire 56 is used to multiplex al of the signals which are required by the user in the location 54... The various signals referred to above, are handled by the information outlet [including demodulators] 52 by means of a variety of connectors and ports on the information outlet 56. These include a downstream video connector 78... a telephone jack 72, a data port 84, serial data connectors 86, 88, and infrared signals from a remote control unit 76” (Sutton 3:43-61) wherein the splitting of the signals to their respective ports is inherent to the proper provisioning of signals to the corresponding devices connected to the connectors and ports. However, the Sutton, Jr. reference is silent as to the operation of the modulators and demodulators within the disclosed information outlet. Now note the Klein reference which discloses a broadband cable television and computer network. The claimed “and at least one demodulator electrically connected to said RF splitter and suitable for demodulating at least the IP signal portion split by the RF splitter” is met by “...is routed to a first tunable receiver/demodulator 70 having a frequency range of approximately 50 to 750 MHz. This receiver additionally may comprise one or more demodulators for retrieving NTSC or Pal encoded video from the cable television service, FM audio signals, and also for recovering digital data from, for example, cable service provided Internet access” (Klein 8:1-9). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Sutton, Jr. information outlet with demodulators and

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modulators with the Klein coupling and splitting of different signals to their respective demodulators for the purpose of providing the correct signal to each output of the wall mounted information outlet where various media and data signals can be sent over a single coaxial line in addition to providing properly formatted signals to a corresponding device.

As to claim 5, note the Sutton, Jr. reference which discloses an information outlet and industrial set top functionality. The claimed "wideband signal distribution system for distributing a plurality of non-IP, RF modulated signals" is met by "...coax wire 56 is used to multiplex all of the signals which are required by the user in the location 54...signals which are sent over the coax cable 56 include video signals from a video monitor or a conventional TV receiver 68" (Sutton, Jr. 3:43-47), note that coaxial cable is recognized as a cabling choice in the 568 wiring standard. The claimed "at least one intelligent device for demodulating single frequency carrier RF signals off of said wideband signal distribution system" is met by "...information outlet 52 contains the electronics needed for several modulators and demodulators" (Sutton, Jr. 3:13-15). The claimed wherein said single frequency RF signals comprises digital information are met by "[o]ther signals, which may be sent bidirectionally, between the information outlet 52 and the junction box 60, include telephone signals from a telephone 72 or telephone head end 22, data signals from a computer or terminal device 74 or server 20, and infrared signals from a remote control unit 76 (Sutton, Jr. 3:50-55) where the disclosed telephone, computer, and server are intelligent peripherals. The claimed "wherein said at least one intelligent device uses an existing media control access layer of the network in order to control the sharing of media channels among multiple addressable devices in the system" is met by the disclosed Sutton, Jr. bi-directional signaling (Sutton, Jr. 3:50-55). Although the

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Sutton, Jr. reference does not specifically disclose the use of a media control access layer the examiner submits that a MAC is inherent to the disclosed system in order to facilitate the flow of data between connected devices. The claimed “said at least one intelligent device including an RF splitter suitable for receiving said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF modulated signal” is met by “[t]he coax wire 56 is used to multiplex al of the signals which are required by the user in the location 54... The various signals referred to above, are handled by the information outlet 52 by means of a variety of connectors and ports on the information outlet 56. These include a downstream video connector 78... a telephone jack 72, a data port 84, serial data connectors 86, 88, and infrared signals from a remote control unit 76” (Sutton 3:43-61) wherein the splitting of the signals to their respective ports is inherent to the proper provisioning of signals to the corresponding devices connected to the connectors and ports. However, the Sutton, Jr. reference is silent as to the operation of the modulators and demodulators within the disclosed information outlet. Now note the Klein reference which discloses a broadband cable television and computer network. The claimed “and at least one demodulator electrically connected to said RF splitter and suitable for demodulating at least the IP signal portion split by the RF splitter” is met by “...is routed to a first tunable receiver/demodulator 70 having a frequency range of approximately 50 to 750 MHz. This receiver additionally may comprise one or more demodulators for retrieving NTSC or Pal encoded video from the cable television service, FM audio signals, and also for recovering digital data from, for example, cable service provided Internet access” (Klein 8:1-9). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Sutton, Jr. information outlet with demodulators and

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modulators with the Klein coupling and splitting of different signals to their respective demodulators for the purpose of providing the correct signal to each output of the wall mounted information outlet where various media and data signals can be sent over a single coaxial line in addition to providing properly formatted signals to a corresponding device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny Ma whose telephone number is (571) 272-7351. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jm



**VIVEK SRIVASTAVA
PRIMARY EXAMINER**